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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,423	03/19/2004	Monica DeGraffenreid	81087762	7209
28866	7590	06/24/2005	EXAMINER	
MACMILLAN, SOBANSKI & TODD, LLC ONE MARITIME PLAZA - FOURTH FLOOR 720 WATER STREET TOLEDO, OH 43604			LE, DAVID D	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/804,423	Applicant(s) DEGRAFFENREID, MONICA	
	Examiner David D. Le	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 6-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/19/04</u> . | 6) <input type="checkbox"/> Other: _____ |

[Handwritten signature]

DETAILED ACTION

1. This is the first Office action on the merits of Application No. 10/804,423, filed 19 March 2004. Claims 1-11 are pending.

Documents

2. The following documents have been received and filed as part of the patent application:
- Information Disclosure Statement, received on 03/19/04

Election/Restrictions

3. This application contains claims directed to the following patentably distinct species of the claimed invention:

- Species A: Figs. 1-3 and 6;
- Species B: Figs. 1 and 4-5.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. During a telephone conversation with applicant's attorney, Franklin Mackenzie, on 14 June 2005 a provisional election was made without traverse to prosecute the invention of Species B, Figs. 1 and 4-5, claims 1-5. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected Species.

Drawings

5. The drawings are objected to because, in Fig. 4, reference number "48" should be --48'--.
(See page 4, line 36, of the present specification)

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing

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sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities:
- The spacing of the lines of the specification (including the abstract and claims) is such as to make reading difficult. New application papers with lines 1½ or double spaced on good quality paper are required. See 37 CFR § 1.52 (b)(2)(i).
 - Page 3, lines 18-19, to avoid any possible confusions, elements “the first transfer case output 18” and “rear drive shaft 18” should have two different reference numbers.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 1-5:

- Claim 1, lines 10-11 recite the limitation "the first transfer drive". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. **Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 4,745,825 to Yamamoto.**

Claims 1-5:

Yamamoto (i.e., Fig. 2; column 4, line 31 – column 7, line 36) discloses a transfer system comprising:

- An input (76);

- A first output (82);
- A speed reduction drive path (i.e., Fig. 2, being the low-speed operating mode) driveably connected to the input and first output, for driving the first output at a slower speed than a speed of the input;
- A coupler (i.e., element 108) for releaseably connecting the input and first output;
- A second output (128);
- A transfer drive (i.e., Fig. 2, being the combination of elements 120, 126, and 130) continually driveably connecting the first output and second output;
- A clutch (i.e., Fig. 2, being the combination of elements 114, 116, 118, and 124) for releaseably connecting the speed reduction drive path and the transfer drive;
- Wherein the speed reduction drive path further includes a layshaft (94) spaced laterally from the input, a pinion (90) secured to the input, a gear (92) supported on the layshaft and driveably connected to the pinion, a second pinion (96) supported on the layshaft and secured to the gear, a second gear (112) secured to the first output and driveably connected to the second pinion (i.e., Fig. 2);
- Wherein the second gear includes clutch teeth (i.e., Fig. 2, being the teeth of clutch element 114) and the coupler includes a hub (104) secured to the input and inherently including spline teeth formed at a radially outer surface, and a sleeve (108) supported on the hub for displacement relative to the hub and inherently including clutch teeth continually engaged with the spline teeth on the hub and alternately engaged with, and disengaged from the clutch teeth on the second gear as the sleeve moves on the hub (i.e., Fig. 2);

- Wherein the layshaft is spaced laterally from the input and the input and first output are coaxial, and the second output is spaced laterally from the first output (i.e., Fig. 2); and
- Wherein the transfer drive includes a first sprocket wheel (120) rotatably supported on the first output, a second sprocket wheel (130) secured to the second output, and a drive chain (126) driveably engaged with the first sprocket wheel and the second sprocket wheel.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Batchelor et al. (U. S. Patent No. 4,901,598) teaches a transfer case as shown in Fig. 1.
- Williams (U. S. Patent No. 5,911,644) teaches a two-speed transfer case with synchronized range shift mechanism as shown in Fig. 2.
- Shono et al. (U. S. Patent No. 4,215,593) teaches a transfer case as shown in Fig. 1.
- Kako et al. (U. S. Patent No. 4,292,860) teaches a transfer device as shown in Fig. 1.
- Cochran et al. (U. S. Patent No. 4,559,846) teaches a gear transfer unit as shown in Fig. 3.
- Japanese Patent No. JP362149515A teaches a power transmission device as shown in Fig. 1.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0700-1530).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ddl

Charles A Marmor 6/29/05
CHARLES A MARMOR
SUPERVISORY PATENT EXAMINER
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